

What is Claimed is:

1. An American football, comprising:

5 a ball cover comprising at least four elliptical cover pieces sewn edge to edge together, wherein each of said cover pieces comprises an outer elliptical cover skin and an inner elliptical construction liner which is overlappedly attached on an inside of said cover skin for supporting said cover skin, wherein each of said construction liners is produced by compressing and vulcanizing a rubber piece of predetermined thickness and at least a fabric lining until said fabric lining is integrally united with said rubber piece to form said construction liner which has a size and shape at least equal to said outer cover skin; and

10 an inflatable bladder disposed within said ball cover for propping up said ball cover after inflation.

15 2. The American football, as recited in claim 1, wherein said outer elliptical cover skin of each of said cover piece is made of synthetic leather with a backing of foaming material.

3. A construction liner for American football, comprising a rubber piece of predetermined thickness and a fabric lining integrally united with said rubber piece by compressing and vulcanizing to form an integral liner piece.

20 4. The construction liner, as recited in claim 3, wherein each of said construction liners is produced by:

cutting a rubber sheet material into an elliptical rubber piece having a predetermined size;

cutting a fabric sheet material into an elliptical fabric linings having a same size of said rubber piece;

25 compressing and vulcanizing said rubber piece with said fabric lining together in a press mold, so as to unite said rubber piece with said fabric lining integrally to form a rubber-based fabric liner; and

cutting said rubber-based fabric liner to a predetermined size to form said construction liner after said fabric liner is cooled down to room temperature.

5        5.    The construction liner, as recited in claim 4, further comprising an additional fabric lining, said two fabric linings being attached to both sides of said rubber piece respectively, and said two fabric linings and said middle rubber piece are overlapped and placed inside an elliptical shaped compression groove of said press mold, in which said rubber piece, said fabric linings, and said compression groove have identical shape and size that is larger than the size of said construction liner to be produced.

10        6.    The construction liner, as recited in claim 3, further comprising an additional fabric lining, wherein said two fabric linings are integrally attached to both sides of said rubber piece respectively and united with said rubber piece to form said integral liner piece by compressing and vulcanizing.

15        7.    The construction liner, as recited in claim 3, further comprising an additional rubber piece and an additional fabric lining, wherein said two rubber pieces are placed between said two fabric linings respectively and united with said fabric linings to form said integral liner piece by compressing and vulcanizing.

20        8.    The construction liner, as recited in claim 3, further comprising an additional rubber piece and two more fabric linings, wherein said two rubber pieces are placed between said three fabric linings intervally and united with said three fabric linings to form said integral liner piece by compressing and vulcanizing.

9.    A method of making a construction liner, comprising the steps of:

(a)   cutting a rubber sheet material into at least an elliptical rubber piece having a predetermined size;

25        (b)   cutting a fabric sheet material into at least an elliptical fabric linings having a same size of said rubber piece;

(c) compressing and vulcanizing said rubber piece with said fabric lining together in a press mold, so as to unite said rubber piece with said fabric lining integrally to form a rubber-based fabric liner; and

5 (d) cutting said rubber-based fabric liner to a predetermined size to form said construction liner after said fabric liner is cooled down to room temperature.

10 10. The method, as recited in claim 9, wherein, in the step (c), two said fabric lining are attached to both sides of said rubber piece and said two fabric linings and said rubber piece are overlapped and placed inside an elliptical shaped compression groove of said press mold, in which said rubber piece, said fabric linings, and said compression groove have identical shape and size that is larger than the size of said construction liner to be produced.

15 11. The method, as recited in claim 9, wherein, in the step (c), two said rubber pieces are placed between two said fabric linings respectively and said two rubber pieces and said two fabric linings are united to form said integral liner piece by said compressing and vulcanizing.

12. The method, as recited in claim 9, wherein, in the step (c), two said rubber pieces are placed between three said fabric linings intervally, wherein said two rubber pieces and said three fabric linings intervally are united to form said integral liner piece by said compressing and vulcanizing.